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TECHNICAL MEMORANDUM FINAL WORK PLAN FOR VISUAL INSPECTION OF
MUNITIONS AND EXPLOSIVES OF CONCERN AT SITE 17 NSWC INDIAN HEAD MD
8/26/2009
NAVFAC WASHINGTON

Final Work Plan for Visual Inspection of Munitions and Explosives of Concern along Site 17 Shoreline at Naval Support Facility Indian Head, Indian Head, Maryland

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1. Introduction

This work plan presents the objectives, scope, and procedures for conducting a visual inspection of munitions and explosives of concern (MEC) at the Site 17 Shoreline, at NSF-IH in Indian Head, Maryland ([Figure 1](#)).

This memorandum supplements and references the following documents:

- CH2M HILL, 2004. Final Site-Specific Remedial Investigation Report, Sites 11, 13, 17, 21, and 25, Naval District Washington Indian Head, Indian Head, Maryland (herein referred to as the RI report)
- CH2M HILL, 2008. Final Site 17 Groundwater Feasibility Study, Naval Support Facility, Indian Head, Indian Head, Maryland (herein referred to as the FS report)
- CH2M HILL, 2009. Site Inspection Work Plan for Igniter Area – UXO 19, Naval Support Facility Indian Head, Indian Head, Maryland (herein referred to as Igniter Area Site Inspection Work Plan)

2. Rationale for Visual Inspection

Site 17 is defined as a 1,000-foot stretch (2.24 acres) of shoreline along the Mattawoman Creek on the Main Installation ([Figure 2](#)). The facility background, site history, and physical setting are detailed in the RI and FS reports.

On March 17, 2009, the Navy and CH2M HILL conducted a shoreline walkthrough from Site 17 to the Igniter Area. Non-munitions and munitions-related items, dead wood, and other

debris were observed along an approximate 380-foot stretch of the shoreline and shallow water at Site 17. As a result, the Navy has tasked CH2M HILL to perform a visual inspection for MEC items and materials potentially presenting an explosive hazard (MPPEH) along the Site 17 shoreline. The area proposed for the visual inspection is approximately 0.09 acre (380 feet along the shoreline by 10 feet of land from the shoreline to the water's edge). [Figure 2](#) shows the boundaries of the proposed investigation area. The actual extent of the area to be investigated, especially out into the Mattawoman Creek, will be determined in the field on the basis of factors such as accessibility and visual observations.

3. Objective

The objective of the visual inspection of MEC/MPPEH items along the Site 17 Shoreline is to identify and document the types and locations of MEC items along the shoreline and up to the low-tide water line in Mattawoman Creek. This objective will be accomplished through the investigation approaches outlined in Section 4.

4. Scope of Work

General field methodologies for performing the MEC identification and documentation are described in this section.

Mobilization/Demobilization

Mobilization will be coordinated with the Navy and will include staking out the area for identifying munitions items. Because the site is along the shoreline and no intrusive activities will be taking place, utility clearance will not be performed. Access to the site will be evaluated before field activity begins. All security and access requirements specific to the Base will be followed. Demobilization will consist of making sure that the site is left in its condition prior to mobilization.

Personnel

Unexploded ordnance (UXO) personnel assigned to this project will be qualified and certified in accordance with NAVSEAINST 8020.9B, Ammunition and Explosives Personnel Qualification and Certification Program; terms outlined by the U.S. Department of Labor Employment Standards Administration Wage Hour Division for UXO Personnel; and DDESB TP-18, Minimum Qualifications for UXO Technicians and Personnel. For this investigation, two CH2M HILL UXO technicians – a UXO Technician III and UXO Technician II – will conduct the visual inspection, identification, and documentation of MEC/MPPEH items.

Before mobilization, CH2M HILL field personnel will review this Work Plan to ensure that the scope is executed and that health and safety protocols are adhered to as outlined herein. In addition, they will participate in an operation readiness review meeting to go over project scope, roles, responsibilities, and health and safety procedures.

MEC Items Inspection

Before beginning the identification and documentation of MEC items, the UXO technicians will test the global positioning system (GPS) equipment to ensure that it is functioning as designed. The UXO technicians will inspect any observed MEC /MPPEH items along the

shoreline to the water's edge at low tide. Use of a flotation device or diving is not required for this scope of work. Specific tasks for this scope of work are as follows:

1. Identify all MEC/MPPEH items as "type by function"
2. Measure the dimensions such as length, width, and diameter by sections and major breaks in diameter to determine the measurements for the delivery, fuzing, and filler elements of each item
3. Document, if available, nomenclature of and markings on each item
4. Identify, if possible, the condition of the item; for example, it could be categorized as "discarded functional," "UXO," "functioned as designed," or "unknown"
5. Obtain the horizontal location (northing and easting coordinates referenced to the 1983 North American datum) for each item with a portable GPS unit
6. Photograph each item and maintain a photographic log
7. Document all information in a field notebook and portable data assistant (PDA) device
8. Verify by the second UXO technician all MEC items identified by the first UXO technician

CH2M HILL's UXO technicians will not handle any MEC items observed at the site. The Navy will be informed of these items for proper handling and disposal. Following visual inspection activities, removal of shoreline surface debris will take place as part of a base housekeeping effort, which is not included in this work plan.

Documentation

All field information will be documented in handheld PDA devices and/or field notebooks.

Data Evaluation and Reporting

Field data collected during the MEC investigation will be used to identify the types, quantities, and locations of MEC and MEC-related debris items. The data collected will be uploaded into the NAVFAC Atlantic Munitions Response data management system, managed by CH2M HILL. The visual inspection methods, findings, and recommendations will be presented in a technical memorandum for the Indian Head Installation Restoration Team review. The data collected will also be presented in a Munitions Response Site Identification and Notification Report, in accordance with NOSSAINST 8020 15B.

MEC Management and Contingency Plan

As part of the daily safety briefing, CH2M HILL UXO field personnel will be informed that observed MEC items will not be disturbed. If an MEC item is found, the observer will notify a UXO technician, who will inspect the item with the other UXO technician. If the item is confirmed as MEC, it will be properly documented as discussed above. And the end of each working day, the UXO Technician will notify the CH2M HILL PM of identified MEC items, sizes, and relative locations. The CH2M HILL PM in turn will notify the Navy Remedial Project Manager.

Supporting Information and Documentation

Several relevant plans have been prepared in support of the Igniter Area Site Inspection activities. The following Igniter Area Site Inspection Work Plan appendices will be used for the visual inspection of MEC items along the Site 17 shoreline:

- A – MEC Accident Prevention Plan
- B – MEC Project Quality Control Plan
- D – Standard Operating Procedures

Health and Safety Plan

CH2M HILL has prepared a HASP specific to this investigation that will be followed during the field activities. The HASP can be found as Appendix C of the Igniter Area Site Inspection Work Plan.

Schedule

The visual inspection of MEC items along the Site 17 shoreline will be performed in conjunction with the Igniter Area site inspection activities.



